

Element Performance Inspection (EPI) Data Collection Tool
1.3.2 Maintenance / Inspection Schedule (AW)
Revision#:2 Revision Date:09/15/2009

ELEMENT SUMMARY INFORMATION

Scope of Element:

Purpose (operator's responsibility): To establish a method to perform routine maintenance and incorporate time intervals producing a Maintenance/Inspection Schedule that continually maintains the airworthiness of the aircraft.

Objective (FAA oversight responsibility): To determine:

- The effectiveness of the operator's procedures in meeting the desired output of the process,
- If the operator follows its procedures, controls, process measurements, and interfaces, and
- If there were any changes in the personnel identified by the operator as having responsibility and/or authority, for the Maintenance/Inspection Schedule process.

Specific Instructions:

Intentionally left blank

Related EPIs:

Intentionally left blank

SUPPLEMENTAL INFORMATION

Regulatory Requirements:

D.072, Operations Specifications
D.074, Operations Specifications
D.075, Operations Specifications
D.077, Operations Specifications
D.078, Operations Specifications
D.079, Operations Specifications
D.080, Operations Specifications
D.082, Operations Specifications
D.087, Operations Specifications
D.088, Operations Specifications
D.089, Operations Specifications
43.13, Performance rules (general)
43.3, Persons authorized to perform maintenance, preventive maintenance, rebuilding, and alterations
43.7, Persons authorized to approve aircraft, airframes, aircraft engines, propellers, appliances, or component parts for return to service after maintenance, preventive maintenance, rebuilding, or alteration
43.9, Content, form, and disposition of maintenance, preventive maintenance, rebuilding, and alteration records (except inspections performed in accordance with part 91, part 123, part 125, 135.411(a)(1), and 135.419 of this chapter)
91.421, Rebuilt engine maintenance records
119.43, Certificate holder's duty to maintain operations specifications.

119.49, Contents of operations specifications
119.51, Amending operations specifications
121.135, Manual contents
121.367, Maintenance, preventive maintenance, and alterations programs.
121.369, Manual requirements.
121.373, Continuing analysis and surveillance.
121.379, Authority to perform and approve maintenance, preventive maintenance, and alterations.
121.380, Maintenance recording requirements.
121.709, Airworthiness release or aircraft log entry.

Related CFRs & FAA Policy/Guidance:

Related CFRs:

Intentionally left blank

FAA Policy/Guidance:

FAA Order 8900.1, Volume 3, Chapter 43
FAA Order 8900.1, Volume 10, Chapter 6, Section 3
AC 120-16E, Air Carrier Maintenance Program
AC 120-79, Developing and Implementing a Continuous Analysis and Surveillance Program (CASS)

EPI SECTION 1 - PERFORMANCE OBSERVABLES	
Objective: The tasks and questions in this section of the EPI are designed to assist in determining if the operator follows its written procedures and controls and meets the established performance measures of the process. The initial series of questions address the output(s) of the process and the last several questions address whether or not various aspects of the process were followed.	
Tasks	
	The inspector shall accomplish the following tasks:
1	Review the information listed in the Supplemental Information Section of this DCT.
2	Review policies, procedures, instructions, and information for this element.
3	Review the most recently accomplished Safety Attribute Inspection (SAI) for this element.
4	Observe the performance of this element to gain an understanding of the procedures, instructions, and information.
5	Discuss this element with the personnel who perform the duties and responsibilities required by the process.
6	Observe in-service aircraft to ensure that each aircraft and its component parts, accessories, and appliances were/are maintained in an airworthy condition in accordance with the time limits for the accomplishment of the overhaul, replacement, periodic inspection, and routine checks of the aircraft and its component parts, accessories, and appliances.

Questions		
1.1	Did the records for the airframe, aircraft engine, propellers, appliances, and emergency equipment, and parts thereof, show that they were inspected in accordance with the operator's approved time limitations? Updated: Rev # 2 on 09/15/2009 Kind Of Question: Flag, Supplemental, Domestic <i>Related Performance JTIs:</i> 1. Check at the FAA location to obtain the time limitation section of the operation specification, and check at the operator's records repository to determine from aircraft records if the operator has complied with the time limitation section of the operation specification. (JTI ID: 2) <i>Sources:</i> 119.49(a)(8) 2. Check at the operator's technical publication library that items identified as "on condition" are maintained in a continuous airworthy condition by periodic inspections, checks, service, repair, and/or preventive maintenance. (JTI ID: 37) <i>Sources:</i> D.072 (d) 3. Check at the air carrier records repository that parts or subassemblies of components that do not have specific time intervals are checked, inspected, and/or overhauled at the same time limitations specified for the component or accessory to which such parts or subassemblies are related or included at the time period indicated for the ATA chapter heading. (JTI ID: 38)	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain <input type="checkbox"/> Not Observable

	<p><i>Sources:</i> 121.135(b)(17); D.072 (e)</p> <p>4. Check at the air carrier records repository that the Maintenance Time Limitations specified in the manual/document for the aircraft listed in operation specification D089 are accomplished in accordance with the Certificate Holders manual/document. (JTI ID: 53)</p> <p><i>Sources:</i> D.089 a</p>	
1.2	<p>Did the operator perform the appropriate maintenance at the appropriate interval?</p> <p>Note(s): <i>Maintenance is inspection, overhaul, repair, preservation, and the replacement of parts.</i></p> <p><i>Each level of inspection must be clearly defined in the maintenance/inspection schedule. For example, a specific area of the aircraft may require only a visual inspection during pre-flight "A" and "B" checks, but will require a detailed X ray or Zygl inspection in the same area for a "C" or "D" check.</i></p> <p>Updated: Rev # 2 on 09/15/2009 Kind Of Question: Flag, Supplemental, Domestic</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain <input type="checkbox"/> Not Observable
1.3	<p>Did the operator determine the effectiveness of the Maintenance/Inspection Schedule and revise time limitations as necessary?</p> <p>Updated: Rev # 2 on 09/15/2009 Kind Of Question: Flag, Supplemental, Domestic</p> <p><i>Related Performance JTIs:</i></p> <ol style="list-style-type: none"> 1. Check at the air carrier specified location for prior changes to the time limitation section of the operator's operation specification. Check if the standards for changing the time limitations had been followed. (JTI ID: 3) <i>Sources:</i> 119.49(a)(8) 2. Check at the air carrier specified location that any time limitation changes to an item for the aircraft listed in D089 have been FAA approved. (JTI ID: 54) <i>Sources:</i> D.089 b 	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain <input type="checkbox"/> Not Observable
1.4	<p>Did the operator's work/task forms accurately describe the observed scheduled maintenance and/or routine task performance?</p> <p>Note(s): <i>Maintenance is inspection, overhaul, repair, preservation, and the replacement of parts.</i></p> <p><i>Work Forms/Task Cards can be bundled into higher level checks or be specific to control a series of tasks (e.g. Airworthiness Directive actions, tire changes, surface control changes, landing gear changes, engine changes, component overhauls, operational system checks etc.)</i></p> <p>Updated: Rev # 2 on 09/15/2009 Kind Of Question: Flag, Supplemental, Domestic</p> <p><i>Related Performance JTIs:</i></p>	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain <input type="checkbox"/> Not Observable

	<p>1. Check at the operator's maintenance facilities that work forms, job cards, and detailed procedures for performing inspections and other maintenance are of enough scope and detail to maintain aircraft airworthiness. (JTI ID: 136)</p> <p>Sources: FAA Order 8900.1, Volume 3, Chapter 43, Section 1</p>	
1.5	<p>Were the operator's work/task forms accurately and completely filled out as a record of the accomplishment of the tasks?</p> <p>Updated: Rev # 2 on 09/15/2009 Kind Of Question: Flag, Supplemental, Domestic</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain <input type="checkbox"/> Not Observable
1.6	<p>Were the observed airworthiness inspections and Required Inspection Items accurately identified on the operator's work/task forms, performed by the appropriate personnel, and accomplished in accordance with the operator's program?</p> <p>Updated: Rev # 2 on 09/15/2009 Kind Of Question: Flag, Supplemental, Domestic</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain <input type="checkbox"/> Not Observable
1.7	<p>Did the operator successfully accomplish the scheduled checks or routine tasks through shift changes and work interruptions?</p> <p>Updated: Rev # 2 on 09/15/2009 Kind Of Question: Flag, Supplemental, Domestic</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain <input type="checkbox"/> Not Observable
1.8	<p>Did the performance of the operator's scheduled maintenance/inspection produce an airworthy product, regardless of who did the work?</p> <p>Note(s): <i>This should be a post check observation of the aircraft.</i></p> <p><i>Inspection activities must be timed so they do not delay or interfere with passenger boarding or deplaning or impede aircraft service or catering.</i></p> <p>Updated: Rev # 2 on 09/15/2009 Kind Of Question: Flag, Supplemental, Domestic</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain <input type="checkbox"/> Not Observable
1.9	<p>Did the performance of an operator's routine maintenance/inspection task (e.g. airworthiness directive action, tire change, engine change, component overhaul), produce an airworthy product, regardless of who did the work?</p> <p>Note(s): <i>This should be a post check observation of the aircraft.</i></p> <p><i>Inspection activities must be timed so they do not delay or interfere with passenger boarding or deplaning or impede aircraft service or catering.</i></p> <p>Updated: Rev # 2 on 09/15/2009 Kind Of Question: Flag, Supplemental, Domestic</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain <input type="checkbox"/> Not Observable
1.10	<p>Were in-service aircraft found to be airworthy?</p> <p>Note(s): <i>Inspection activities must be timed so they do not delay or interfere with passenger boarding or deplaning or impede aircraft service or catering.</i></p>	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain <input type="checkbox"/> Not Observable

	<p><i>Because of the wide range of inspection areas involved, the inspector should vary the areas of emphasis for an activity. For example, on one activity the inspector may decide to observe and evaluate the interior and during the next activity on the next aircraft observe the exterior.</i></p> <p>Updated: Rev # 2 on 09/15/2009 Kind Of Question: Flag, Supplemental, Domestic</p>	
1.11	<p>Did the operator follow policies, procedures, instructions and information for this element?</p> <p>Updated: Rev # 2 on 09/15/2009 Kind Of Question: Flag, Supplemental, Domestic</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain <input type="checkbox"/> Not Observable
1.12	<p>Did the operator follow controls for this element?</p> <p>Updated: Rev # 2 on 09/15/2009 Kind Of Question: Flag, Supplemental, Domestic</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain <input type="checkbox"/> Not Observable
1.14	<p>Did the records for this element comply with the instructions?</p> <p>Updated: Rev # 2 on 09/15/2009 Kind Of Question: Flag, Supplemental, Domestic</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain <input type="checkbox"/> Not Observable
1.15	<p>Were the process measurements for this element:</p> <ul style="list-style-type: none"> • Effective in identifying actual or potential problems, and • Did the operator identify and take corrective action for the identified problems? <p>Updated: Rev # 2 on 09/15/2009 Kind Of Question: Flag, Supplemental, Domestic</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain <input type="checkbox"/> Not Observable
1.16	<p>Were the observed interfaces identified and documented by the operator?</p> <p>Updated: Rev # 2 on 09/15/2009 Kind Of Question: Flag, Supplemental, Domestic</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain <input type="checkbox"/> Not Observable
1.17	<p>Were the observed interfaces, identified and documented by the operator, adequate to ensure that the intended results were achieved?</p> <p>Updated: Rev # 2 on 09/15/2009 Kind Of Question: Flag, Supplemental, Domestic</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain <input type="checkbox"/> Not Observable

EPI SECTION 1 - PERFORMANCE OBSERVABLES Drop-Down Menu	
1.	Personnel.
2.	Tools and Equipment.
3.	Technical Data.
4.	Policies, procedures, instructions, or information.
5.	Materials.

6.	Facilities.
7.	Controls.
8.	Process Measures.
9.	Interfaces.
10.	Desired Outcome.
11.	Other.

EPI SECTION 2 - MANAGEMENT RESPONSIBILITY & AUTHORITY OBSERVABLES

Objective:

Answers to questions in this section address the responsibility and authority of the people who manage this process. They will help determine if there is a qualified and knowledgeable person who:

- Is responsible for the process
- Is answerable for the quality of the process
- Has the authority to establish and modify the process.

Note: *The person with the authority may or may not be the person with the responsibility.*

Tasks

	The inspector shall accomplish the following tasks:
1	Identify the person who has overall responsibility for the Maintenance/Inspection Schedule.
2	Identify the person who has overall authority for the Inspection Program. Note: If there have been no major changes in key personnel or the program since the last SAI or EPI was accomplished, then only answer questions 1 and 2 below, and select "No Change" (N/C) for the remaining questions. If changes have occurred that affect the responsibility or authority attributes for this element, then accomplish all tasks and answer all questions.
3	Review the duties and responsibilities for the person(s) who manage the processes associated with this element.
4	Review the appropriate organizational chart.
5	Discuss the Maintenance/Inspection Schedule with the management personnel identified in tasks 1 and 2.
6	Review the qualifications and work experience of the management personnel identified in tasks 1 and 2.

Questions

2.1	Is the identified person who is responsible for the quality of the processes associated with this element actively filling that position? Updated: Rev # 2 on 09/15/2009 Kind Of Question: Flag, Supplemental, Domestic	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain <input type="checkbox"/> Not Observable
2.2	Is the identified person who has authority to establish and modify the operator's policies, procedures, instructions and information for the EPI processes associated with this element actively filling that position? Updated: Rev # 2 on 09/15/2009 Kind Of Question: Flag, Supplemental, Domestic	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain <input type="checkbox"/> Not Observable
2.3	Does the responsible person know that he/she has responsibility for the Maintenance/Inspection Schedule? Updated: Rev # 2 on 09/15/2009 Kind Of Question: Flag, Supplemental, Domestic	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain <input type="checkbox"/> Not Observable

2.4	Does the person with authority know that he/she has authority for the Maintenance/Inspection Schedule? Updated: Rev # 2 on 09/15/2009 Kind Of Question: Flag, Supplemental, Domestic	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain <input type="checkbox"/> Not Observable
2.5	Does the person with responsibility for the processes associated with the Maintenance/Inspection Schedule meet the qualification and work experience standards? Updated: Rev # 2 on 09/15/2009 Kind Of Question: Flag, Supplemental, Domestic	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain <input type="checkbox"/> Not Observable
2.6	Does the person with authority to establish and modify the Maintenance/Inspection Schedule meet the qualification and work experience standards? Updated: Rev # 2 on 09/15/2009 Kind Of Question: Flag, Supplemental, Domestic	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain <input type="checkbox"/> Not Observable
2.7	Does the person with responsibility understand the controls, process measurements, and interfaces associated with the Maintenance/Inspection Schedule? Updated: Rev # 2 on 09/15/2009 Kind Of Question: Flag, Supplemental, Domestic	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain <input type="checkbox"/> Not Observable
2.8	Does the person with authority understand the controls, process measurements, and interfaces associated with the Maintenance/Inspection Schedule? Updated: Rev # 2 on 09/15/2009 Kind Of Question: Flag, Supplemental, Domestic	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain <input type="checkbox"/> Not Observable
2.9	Does the person with responsibility know who has authority to establish and modify the processes associated with the Maintenance/Inspection Schedule? Updated: Rev # 2 on 09/15/2009 Kind Of Question: Flag, Supplemental, Domestic	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain <input type="checkbox"/> Not Observable
2.10	Does the person with authority know who has the responsibility for the processes associated with the Maintenance/Inspection Schedule? Updated: Rev # 2 on 09/15/2009 Kind Of Question: Flag, Supplemental, Domestic	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain <input type="checkbox"/> Not Observable

EPI SECTION 2 - MANAGEMENT RESPONSIBILITY & AUTHORITY OBSERVABLES	
Drop-Down Menu	
1.	Assignment of responsibility.
2.	Assignment of authority.
3.	Does not understand policies, procedures, instructions, or information.
4.	Does not understand controls.
5.	Does not understand process measurements.
6.	Does not understand interfaces.
7.	Span of control.
8.	Position vacant.

9. Other.
